

Amendments to the Claims

Please cancel claim 27, amend claims 38, 43, 74 and 105-107 and add claims 109-110 as follows. This listing of the claims will replace all prior versions, and listings, of the claims in this application. As mentioned above, the following claims reflect the addition of claim 108 and the amendments to claims 38, 54 and 74 made in the Supplemental Amendment filed by facsimile on 22 May 2003.

3. (Previously Amended) The prosthesis according to claim 40 wherein the delay-release material comprises a biodegradable, delay-release layer.
4. (Previously Amended) The prosthesis according to claim 38 wherein the dispensable agent is microencapsulated using a biodegradable encapsulation material so as to delay migration of said drug from said prosthesis.
8. (Previously Amended) The prosthesis according to claim 38 wherein said body has longitudinally extending side members and cross members connecting said side members.
9. (Previously Amended) The prosthesis according to claim 38 wherein said body is made of metal.
11. (Previously Amended) The prosthesis according to claim 38 wherein the prosthesis comprises turns, adjacent ones of said turns touching one another when in the radially-expanded state.
19. (Previously Amended) The prosthesis according to claim 38 further comprising first and second dispensable agents.
20. (Original) The prosthesis according to claim 19 wherein said first agent is layered on top of said second agent.
21. (Original) The prosthesis according to claim 19 wherein said first agent is dispensable prior to the start of dispensing of the second agent.
22. (Original) The prosthesis according to claim 19 wherein at least half of said first agent is dispensable prior to the start of dispensing of the second agent.
23. (Previously Amended) The prosthesis according to claim 38 wherein said material is a porous material.
25. (Original) The prosthesis according to claim 23 wherein said porous material has an inner surface which is substantially impervious to the passage of blood therethrough.
26. (Previously Amended) The prosthesis according to claim 38 wherein the dispensable agent is selected from the group comprising: anti-inflammatory drugs, anti-thrombotic/anti-platelet drugs, anti-proliferative drugs, apoptosis-inducing drug, light activated drug, and biological materials.

38. (Thrice Amended) A prosthesis, for use ~~within a hollow body structure inside a blood vessel~~ of a patient, comprising:

    a coiled body having radially-extending openings formed therethrough, the body movable from a radially-contracted state to a radially-expanded state;

    a coiled sleeve of porous material extending along a coiled path, the material having an inner surface and an outer surface and defining the sleeve interior containing the coiled body; and

    a dispensable, biologically active agent ~~on at least one of said inner surface of the material and within the sleeve interior, said dispensable agent being dispensable from the sleeve interior, through the inner surface, through the material, out of the outer surface~~ and into a ~~hollow body structure blood vessel~~ of a patient.

39. (Original) The prosthesis according to claim 38 wherein the dispensable agent comprises an anti-restenotic agent.

40. (Amended) The prosthesis according to claim 38 further comprising a delay-release material associated with the dispensable agent to delay the release of the dispensable agent into the ~~hollow body structure blood vessel~~.

41. (Original) The prosthesis according to claim 38 wherein said prosthesis comprises spaced apart turns defining gaps therebetween when in the radially-expanded state.

42. (Original) The prosthesis according to claim 38 wherein said material comprises porous PTFE.

43. (Twice Amended) A method for delivering a biologically active agent to a target site ~~within a hollow body structure inside a blood vessel~~ of a patient, comprising:

    selecting a coiled prosthesis comprising a coiled body having longitudinally extending side members and cross members connecting said side members, the coiled body having radially-extending openings formed therethrough, a material extending along a coiled path along the entire coiled body, and a dispensable, biologically active agent associated with at least one of the coiled body and the material;

    delivering the coiled prosthesis to a target site ~~within a hollow body structure inside a blood vessel~~ of a patient, the prosthesis being in a radially-contracted state;

    radially expanding the prosthesis from the radially-contracted state to a radially-expanded state so to press the prosthesis against a wall of the ~~hollow body structure blood vessel~~; and

    releasing the agent into the ~~hollow body structure blood vessel~~.

45. (Original) The method according to claim 43 wherein the radially expanding step is carried out with a prosthesis comprising spaced apart turns defining gaps therebetween when in the radially-expanded state.
46. (Original) The method according to claim 43 wherein the radially expanding step is carried out with a prosthesis comprising turns which touch one another when in the radially-expanded state.
47. (Original) The method according to claim 43 further comprising selecting a prosthesis in which the material comprises a coiled sleeve of material, said coiled sleeve of material having inner and outer surfaces, said inner surface defining a sleeve interior containing the entire coiled body.
48. (Original) The method according to claim 43 further comprising selecting a prosthesis in which the agent comprises first and second dispensable agents.
49. (Original) The method according to claim 48 further comprising selecting a prosthesis having said first agent layered on top of said second agent.
50. (Original) The method according to claim 48 wherein the releasing step is carried out so that at least a portion of said first agent is released prior to the start of release of the second agent.
51. (Original) The method according to claim 48 wherein the controllably releasing step is carried out so that at least half of said first agent is released prior to the start of release of the second agent.
52. (Original) The method according to claim 43 further comprising selecting a prosthesis comprising porous material as said material.
53. (Original) The method according to claim 52 wherein the selecting step is carried out by selecting a prosthesis with said porous material comprising ePTFE.
54. (Previously Amended) The method according to claim 52 wherein the selecting step is carried out by selecting a prosthesis with said porous material having a surface which is substantially impervious to the passage of blood therethrough.
55. (Original) The method according to claim 43 further comprising selecting a prosthesis having a delay-release material associated with the dispensable agent.
56. (Original) The method according to claim 55 wherein the selecting step is carried out by selecting a prosthesis in which the delay-release material comprises a biodegradable, delay-release material.
57. (Original) The method according to claim 55 wherein the selecting step is carried out by selecting a prosthesis in which the delay-release material comprises a delay-release layer covering the dispensable agent.
59. (Original) The method according to claim 55 wherein the selecting step is carried out by selecting a prosthesis in which the delay-release material comprises a biodegradable polymer.

60. (Original) The method according to claim 55 wherein the delay-release material comprises a protective layer, and further comprising removing the protective layer from the coiled body and material therewith thereby exposing the coiled body and material therewith.

61. (Original) The method according to claim 43 further comprising selecting a prosthesis comprising a dispensable agent selected from the group comprising: anti-inflammatory drugs, anti-thrombotic/anti-platelet drugs, anti-proliferative drugs, apoptosis-inducing drug, light activated drug, and biological materials.

62. (Original) The method according to claim 43 further comprising selecting an anti-restenotic agent as the dispensable agent.

74. (Thrice Amended) A method for delivering a biologically active agent to a target site ~~within a hollow body structure inside a blood vessel~~ of a patient, comprising:

delivering a coiled prosthesis to a target site ~~within a hollow body structure inside a blood vessel~~ of a patient, the blood vessel comprising a wall, the prosthesis being in a radially-contracted state, the prosthesis comprising a coiled body having radially-extending openings formed therethrough, a coiled sleeve of material extending along a coiled path, the coiled sleeve of material comprising inner and outer surfaces, said inner surface defining a sleeve interior containing the entire coiled body, and a dispensable, biologically active agent ~~on at least one of the inner surface of the material and within the sleeve interior;~~

radially expanding the prosthesis from the radially-contracted state to a radially-expanded state so to press the prosthesis against the wall; and

releasing the agent ~~through the material and into the hollow body structure blood vessel, the agent passing from the interior, through the material and into the blood vessel.~~

75. (Original) The method according to claim 74 further comprising selecting an anti-restenotic agent as the dispensable agent.

76. (Amended) The method according to claim 74 wherein the releasing step comprises temporally controllably releasing the agent into the ~~hollow body structure blood vessel~~.

77. (Original) The method according to claim 74 wherein the radially expanding step is carried out with a prosthesis comprising spaced apart turns defining gaps therebetween when in the radially-expanded state.

78. (Original) The method according to claim 74 further comprising selecting a prosthesis comprising porous PTFE as said material.

101. (Previously Added) The prosthesis according to claim 38 wherein the sleeve interior comprises regions occupied by the coiled body and open spaces not occupied by the coiled body.
102. (Previously Added) The prosthesis according to claim 101 wherein the sleeve interior is oversized relative to the coiled body so to loosely contain the coiled body.
103. (Previously Added) The method according to claim 74 wherein the delivering step is carried out with the sleeve interior comprising regions occupied by the coiled body and open spaces not occupied by the coiled body.
104. (Previously Added) The method according to claim 103 wherein the delivering step is carried out with the sleeve interior being oversized relative to the coiled body so to loosely contain the coiled body.
105. (Amended) The prosthesis according to claim 38 wherein the agent comprises NO created within the sleeve interior by an NO generator within the sleeve interior.
106. (Amended) The method according to claim 43 wherein the selecting step comprises choosing an agent comprising NO created by an NO generator.
107. (Amended) The method according to claim 74 wherein the delivering step comprises choosing an agent comprising NO created within the sleeve interior by an NO generator within the sleeve interior.
108. (Previously Added) The prosthesis according to claim 1 wherein the material is a porous vascular graft material.
109. (New) The prosthesis according to claim 101 wherein the agent comprises NO created within the sleeve interior by an NO generator within the sleeve interior.
110. (New) The method according to claim 103 wherein the delivering step comprises choosing an agent comprising NO created within the sleeve interior by an NO generator within the sleeve interior.